INTERNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{H04L} & \mbox{H03M} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 2001/034868 A1 (EL-GAMAL HESHAM ET AL) 25 October 2001 (2001-10-25)	1-4, 6-10, 12-17, 19-21, 23,24
	page 3, left-hand column, paragraph 31 page 4, left-hand column, paragraphs 38,39 page 4, right-hand column, paragraphs 40,42,45	23,24
	page 5, left-hand column, paragraphs 46,47,49 page 5, right-hand column, paragraphs	
	54,58,62; figures 5,6	
	,	
		1

LA SAME SAME	A definite members are instead in armex.
Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance E' earlier document but published on or after the international filing date L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) C' document referring to an oral disclosure, use, exhibition or other means P' document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 15 July 2004 Name and mailing address of the ISA	Date of mailing of the international search report 22/07/2004
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31~70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Papantoniou, A

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Internal Application No PCT/EP2004/004397

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
K	US 2002/118126 A1 (CORNELIUS WILLIAM P ET AL) 29 August 2002 (2002-08-29) page 2, left-hand column, paragraph 12 page 3, right-hand column, paragraph 44-48 page 4, left-hand column, paragraph 49 page 7, left-hand column, paragraph 85 page 7, left-hand column, paragraph 86 - right-hand column page 7, right-hand column, paragraphs 87,88; figures 1,2,11	1,2, 6-10,12, 20,23,24				
A	US 2002/101915 A1 (DECZKY ANDREW ET AL) 1 August 2002 (2002-08-01) page 3, right-hand column, paragraph 52 page 4, right-hand column, paragraph 63 page 13, left-hand column, paragraph 142; figure 17	1,23,24				

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Interpolation No
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